DAY 3: HACKATHON 3

"API Integration and Data Migration"

API Integration Process:

Steps:

1. API end-point: `'https://template-03-api.vercel.app/api/products'`
2. Data migration: From provided GitHub repository
3. Project ID: Provide by sanity.io
4. Dataset: Provide by sanity.io
5. Token: Generated unique token
6. Above key variables added in .env file as:
    a. NEXT_PUBLIC_SANITY_PROJECT_ID
    b. NEXT_PUBLIC_SANITY_DATASET
    c. SANITY_API_TOKEN
7. Installed @sanity/client: To establish connection with sanity project.
8. Installed axios: This is used to fetch data and error handling.
9. Installed dotenv: To get data from client

API Integration and Data Migration: (snap)

```js
scripts > JS data-migration.mjs > ...
  1   import { createClient } from '@sanity/client';
  2   import axios from 'axios';
  3   import dotenv from 'dotenv';
  4   import { fileURLToPath } from 'url';
  5   import path from 'path';
  6
  7   // Load environment variables from .env.local
  8   const __filename = fileURLToPath(import.meta.url);
  9   const __dirname = path.dirname(__filename);
 10   dotenv.config({ path: path.resolve(__dirname, '../.env.local') });
 11   |
 12   // Create Sanity client
 13   const client = createClient({
 14     projectId: process.env.NEXT_PUBLIC_SANITY_PROJECT_ID,
 15     dataset: process.env.NEXT_PUBLIC_SANITY_DATASET,
 16     useCdn: false,
 17     token: process.env.SANITY_API_TOKEN,
 18     apiVersion: '2021-08-31'
 19   });
 20
 21
 22   async function uploadImageToSanity(imageUrl) {
 23     try {
 24       console.log(`Uploading image: ${imageUrl}`);
 25       const response = await axios.get(imageUrl, { responseType: 'arraybuffer' });
 26       const buffer = Buffer.from(response.data);
 27       const asset = await client.assets.upload('image', buffer, {
 28         filename: imageUrl.split('/').pop()
 29       });
 30       console.log(`Image uploaded successfully: ${asset._id}`);
 31       return asset._id;
 32     } catch (error) {
 33       console.error('Failed to upload image:', imageUrl, error);
 34       return null;
 35     }
 36   }
 37
 38   async function importData() {
 39     try {
 40       console.log('migrating data please wait...');
 41
 42       // API endpoint containing car data
 43       const response = await axios.get('https://template-03-api.vercel.app/api/products');
 44       const products = response.data.data;
 45       console.log("products ==>> ", products);
 46
```
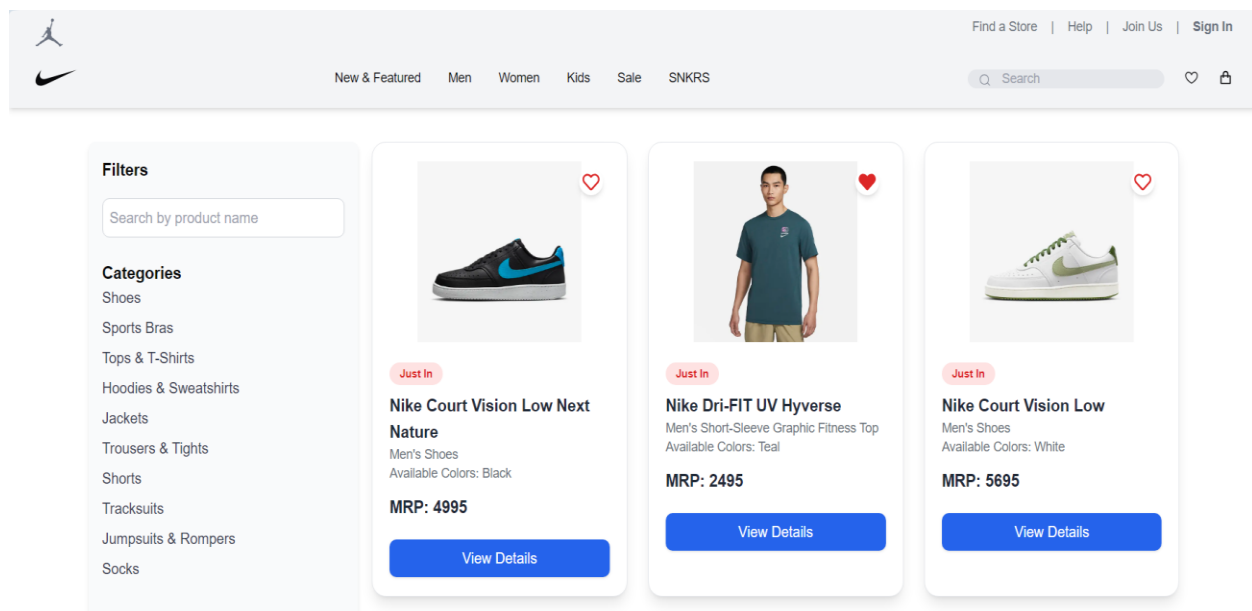
```js
 48       for (const product of products) {
 49         let imageRef = null;
 50         if (product.image) {
 51           imageRef = await uploadImageToSanity(product.image);
 52         }
 53
 54         const sanityProduct = {
 55           _type: 'product',
 56           productName: product.productName,
 57           category: product.category,
 58           price: product.price,
 59           inventory: product.inventory,
 60           colors: product.colors || [], // Optional, as per your schema
 61           status: product.status,
 62           description: product.description,
 63           image: imageRef ? {
 64             _type: 'image',
 65             asset: {
 66               _type: 'reference',
 67               _ref: imageRef,
 68             },
 69           } : undefined,
 70         };
 71
 72         await client.create(sanityProduct);
 73       }
 74
 75       console.log('Data migrated successfully!');
 76     } catch (error) {
 77       console.error('Error in migrating data ==>> ', error);
 78     }
 79   }
 80
 81   importData();
```

```
    {
        productName: "Nike Air Force 1 Mid '07",
        category: "Men's Shoes",
        price: 10795,
        inventory: 20,
        colors: [ 'White' ],
        status: 'Just In',
        image: 'https://template-03-api.vercel.app/products/1.png',
        description: "The Nike Air Force 1 Mid '07 delivers timeless style with premium
leather and mid-cut design. Perfect for everyday wear, it provides exceptional comfo
rt and durability. The iconic Air-Sole cushioning adds responsive support for long-l
asting performance."
    },
    {
        productName: 'Nike Court Vision Low Next Nature',
        category: "Men's Shoes",
        price: 4995,
        inventory: 35,
        colors: [ 'Black' ],
        status: 'Just In',
        image: 'https://template-03-api.vercel.app/products/2.png',
        description: 'The Nike Court Vision Low Next Nature combines retro basketball st
yle with modern sustainability. Made with at least 20% recycled content, it features
 a sleek design, durable materials, and ultimate comfort for everyday wear.'
    },
    {
        productName: 'Nike Air Force 1 PLT.AF.ORM',
        category: "Women's Shoes",
        price: 8695,
        inventory: 18,
        colors: [ 'White' ],
        status: 'Just In',
        image: 'https://template-03-api.vercel.app/products/3.png',
        description: "The Nike Air Force 1 PLT.AF.ORM elevates the iconic AF1 silhouette
with bold design updates. Featuring a platform sole and premium materials, this wom
en's shoe redefines style and comfort in a fresh, modern way."
    },
```

UI Interface:

Schema:

```
1   export const productSchema = {
2       name: 'product',
3       title: 'Product',
4       type: 'document',
5       fields: [
6           {
7               name: 'productName',
8               title: 'Product Name',
9               type: 'string',
10          },
11          {
12              name: 'category',
13              title: 'Category',
14              type: 'string',
15          },
16          {
17              name: 'price',
18              title: 'Price',
19              type: 'number',
20          },
21          {
22              name: 'inventory',
23              title: 'Inventory',
24              type: 'number',
25          },
26          {
27              name: 'colors',
28              title: 'Colors',
29              type: 'array',
30              of: [{ type: 'string' }],
31          },
32          {
33              name: 'status',
34              title: 'Status',
35              type: 'string',
36          },
37          {
38              name: 'image',
39              title: 'Image',
40              type: 'image', // Using Sanity's image type for image field
41              options: {
42                  hotspot: true,
43              },
44          },
45          {
46              name: 'description',
47              title: 'Description',
48              type: 'text',
49          },
50      ],
51  }
```

Studio: